



2633  
No Fee

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 560043610132

Group: 2633 )  
Examiner: Shi K. Li )  
Inventor: George H. BuAbbud )  
Serial No.: 09/540,955 )  
Filed: March 31, 2000 )  
Title: Bidirectional Frequency Shift )  
Coding Using Two Different Codes )  
For Upstream And Downstream )

REFILING OF  
REPLY TO OFFICE ACTION

RECEIVED

FEB 12 2004

Technology Center 2600

CERTIFICATE OF MAILING

*I hereby certify that this correspondence is being transmitted via Facsimile to United States Patent & Trademark Facsimile Number (703) 872-9306. A confirmation copy is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 4, 2004.*

By *James E. Linton*

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

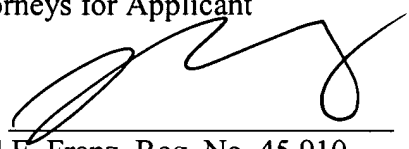
Attached hereto is a copy of Applicant's Office Action Reply ("Reply") originally filed on September 4, 2003. The Examiner called the Applicant's attorney on February 4, 2004 and informed Applicant's attorney that the Reply to the Office Action of June 5, 2003 had not been received.

As evidenced by the OIPE-Stamped Postcard, the Reply was received in the USPTO on September 8, 2003. The Examiner accepted the Applicant's offer to Refile the Reply via facsimile. Because the Reply was originally filed before the three-month period for reply expired, no extension fees are due.

Respectfully submitted,

JONES DAY  
Attorneys for Applicant

Date: February 4, 2004

By:   
Paul E. Franz, Reg. No. 45,910

North Point  
901 Lakeside Ave.  
Cleveland, Ohio 44114  
Phone (216) 586-1162



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Express Mail No.: \_\_\_\_\_  
Docket No.: 560043-610132 C  
Application No.: 09/540955  
Patent/Registration No.: \_\_\_\_\_  
Trademark: \_\_\_\_\_

Date Mailed: September 4, 2003  
Applicant: BuAbbud  
Filing Date: March 31, 2000  
Issue/Registration Date: \_\_\_\_\_  
Title: BiDirectional Frequency Shift Coding Using Two  
Different Codes for Upstream and Downstream

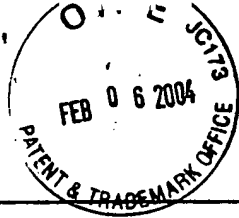
THE USPTO ACKNOWLEDGES AND HAS STAMPED THE DATE OF RECEIPT OF THE ITEMS CHECKED BELOW:

☐ Affidavit (\_\_\_\_ pages)  
☒ Amendment (14 pages)  
☐ Application Papers  
    \_\_\_\_ sheets of drawing(s) (formal/informal)  
    \_\_\_\_ pages specification  
    \_\_\_\_ pages description  
    \_\_\_\_ pages claims  
    \_\_\_\_ pages abstract  
    \_\_\_\_ pages of PCT Request  
    \_\_\_\_ PCT Calculation sheet  
  
\_\_\_\_ Application Data Sheet  
\_\_\_\_ Assignment (\_\_\_\_ pages)      Assignment cover sheet  
\_\_\_\_ Declaration (\_\_\_\_ pages)  
\_\_\_\_ Declaration/Power of Attorney (\_\_\_\_ pages)  
☒ Fee Transmittal Form - 2 cys  
\_\_\_\_ IDS & PTO-1449 and  
    \_\_\_\_ cited item(s)  
\_\_\_\_ Provisional Application for Patent cover sheet



☐ Design Patent Application Transmittal  
☐ Utility Patent Application Transmittal  
☐ Issue Fee Transmittal  
☐ Maintenance Fee Transmittal Form  
☐ Notice of Opposition  
☐ Petition for Extension of Time  
☐ Preliminary Amendment (\_\_\_\_ pages)  
☐ Renewal Application (\_\_\_\_ pages)  
☐ Response (\_\_\_\_ pages)  
☐ Revocation of Power of Attorney and Appointment of New Attorney  
☐ Small Entity Statement  
☐ Specimens  
☐ Statement of Use  
☐ Status Inquiry  
☒ Transmittal Letter  
☐ Check - Amount \$ \_\_\_\_\_  
☒ Other - Patent Application Fee Determination Record

*[Signature]*



Express Mail No.: \_\_\_\_\_  
Docket No.: 560043-610132  
Application No.: 09/540955  
Patent/Registration No.: \_\_\_\_\_  
Trademark: \_\_\_\_\_

Date Mailed: September 4, 2003  
Applicant: BuAbbud  
Filing Date: March 31, 2000  
Issue/Registration Date: \_\_\_\_\_  
Title: BiDirectional Frequency Shift Coding Using Two  
Different Codes for Upstream and Downstream

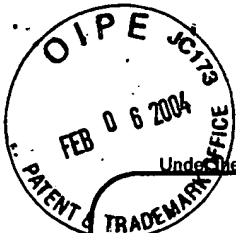
THE USPTO ACKNOWLEDGES AND HAS STAMPED THE DATE OF RECEIPT OF THE ITEMS CHECKED BELOW:

<input type="checkbox"/> Affidavit (____ pages)	<input type="checkbox"/> Design Patent Application Transmittal
<input checked="" type="checkbox"/> Amendment (14 pages)	<input type="checkbox"/> Utility Patent Application Transmittal
<input type="checkbox"/> Application Papers	<input type="checkbox"/> Issue Fee Transmittal
<input type="checkbox"/> sheets of drawing(s) (formal/informal)	<input type="checkbox"/> Maintenance Fee Transmittal Form
<input type="checkbox"/> pages specification	<input type="checkbox"/> Notice of Opposition
<input type="checkbox"/> pages description	<input type="checkbox"/> Petition for Extension of Time
<input type="checkbox"/> pages claims	<input type="checkbox"/> Preliminary Amendment (____ pages)
<input type="checkbox"/> pages abstract	<input type="checkbox"/> Renewal Application (____ pages)
<input type="checkbox"/> pages of PCT Request	<input type="checkbox"/> Response (____ pages)
<input type="checkbox"/> PCT Calculation sheet	<input type="checkbox"/> Revocation of Power of Attorney and Appointment of New Attorney
<input type="checkbox"/> Application Data Sheet	<input type="checkbox"/> Small Entity Statement
<input type="checkbox"/> Assignment (____ pages) <input type="checkbox"/> Assignment cover sheet	<input type="checkbox"/> Specimens
<input type="checkbox"/> Declaration (____ pages)	<input type="checkbox"/> Statement of Use
<input type="checkbox"/> Declaration/Power of Attorney (____ pages)	<input type="checkbox"/> Status Inquiry
<input checked="" type="checkbox"/> Fee Transmittal Form - 2 cys	<input checked="" type="checkbox"/> Transmittal Letter
<input type="checkbox"/> IDS & PTO-1449 and	<input type="checkbox"/> Check - Amount \$ _____
<input type="checkbox"/> cited item(s)	<input checked="" type="checkbox"/> Other - Patent Application Fee Determination Record
<input type="checkbox"/> Provisional Application for Patent cover sheet	

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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/540955
Filing Date	March 31, 2000
First Named Inventor	BuAbbud
Art Unit	2633
Examiner Name	Shi K. Li
Attorney Docket Number	560043610132

Total Number of Pages in This Submission

### ENCLOSURES (Check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Patent Application Fee Determination Record
<div>Remarks</div> <div><b>RECEIVED</b> FEB 12 2004 Technology Center 2600</div>		

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Paul E. Franz, Esq. Jones Day
Signature	
Date	September 4, 2003

### CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Suzanne Koston		
Signature		Date	September 4, 2003

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FEB 06 2004

PTO/SB/17 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**FEE TRANSMITTAL**  
**for FY 2003**

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT**

(\$ 84.00)

Complete if Known

**RECEIVED**

Application Number 09/540955

Filing Date March 31, 2000

FEB 12 2004

First Named Inventor BuAbbud

Examiner Name Shi K. Li

Technology Center 2600

Art Unit 2633

Attorney Docket No. 560043610132

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☐ Deposit Account:Deposit Account Number  
Deposit Account Name

501432(Ref. 560043610132)

Jones Day

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

**SUBTOTAL (1)**

(\$)

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
16	-20** = 0	0	0
Independent Claims	7	-3** = 84	84
Multiple Dependent			

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

**SUBTOTAL (2)**

(\$ 84.00)

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)**

(\$)

**SUBMITTED BY**

(Complete if applicable)

Name (Print/Type)

Paul E. Franz, Esq.

Registration No.  
(Att/Agent)

45,910

Telephone

216/586-3939

Signature

Date

September 4, 2003

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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# PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number  
560043610132

## CLAIMS AS FILED - PART I

(Column 1)

(Column 2)

SMALL ENTITY

OR

OTHER THAN  
SMALL ENTITY

FOR	NUMBER FILED	NUMBER EXTRA
BASIC FEE (37 CFR 1.16(a))		
TOTAL CLAIMS (37 CFR 1.16(c))	11 minus 20 =	-0-
INDEPENDENT CLAIMS (37 CFR 1.16(b))	2 minus 20 =	-0-
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(d))		

RATE	FEE
	\$
X \$	
X \$	
+ \$	
TOTAL	

OR

OR

OR

OR

OR

OR

RATE	FEE
	\$
X \$	
X \$	
+ \$	
TOTAL	

\* If the difference in column 1 is less than zero, enter "0" in column 2.

## CLAIMS AS AMENDED - PART II

(Column 1)

(Column 2)

(Column 3)

SMALL ENTITY

OR

OTHER THAN  
SMALL ENTITY

AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total (37 CFR 1.16(c))	15	Minus	** -0-	= -0-
	Independent (37 CFR 1.16(b))	6	Minus	*** -0-	= 3
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))				

RATE	ADDI- TIONAL FEE
X \$	
X \$	
+ \$	
TOTAL ADD'L FEE	

OR

OR

OR

OR

OR

RATE	ADDI- TIONAL FEE
X \$	
X \$	
+ \$	
TOTAL ADD'L FEE	\$252.00

(Column 1)

(Column 2)

(Column 3)

AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total (37 CFR 1.16(c))	16	Minus	** -0-	= -0-
	Independent (37 CFR 1.16(b))	7	Minus	*** 6	= 1
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))				

RATE	ADDI- TIONAL FEE
X \$	
X \$	
+ \$	
TOTAL ADD'L FEE	

OR

OR

OR

OR

OR

RATE	ADDI- TIONAL FEE
X \$	
X \$	
+ \$	
TOTAL ADD'L FEE	\$84.00

(Column 1)

(Column 2)

(Column 3)

AMENDMENT C		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total (37 CFR 1.16(c))		Minus	**	=
	Independent (37 CFR 1.16(b))		Minus	***	=
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))				

RATE	ADDI- TIONAL FEE
X \$	
X \$	
+ \$	
TOTAL ADD'L FEE	

OR

OR

OR

OR

OR

RATE	ADDI- TIONAL FEE
X \$	
X \$	
+ \$	
TOTAL ADD'L FEE	

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

\*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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